

Amendments to the Claims:

Claims 3, 4, 7 and 14 are amended as set forth hereinafter.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method for digitally stabilizing an image recording with a CCD sensor, which is mounted in a moving or airborne carrier, for substantially eliminating unwanted movement influences of flight movements of said carrier on the image quality of the image recorded by said CCD sensor, the method comprising the steps of:

detecting an image with said CCD sensor and outputting image data;

- detecting said flight movements of said carrier as angular data with an inertial sensor having a finite bandwidth causing said inertial sensor to supply said angular data with a time delay;

delaying said image data by a time interval which considers said time delay; and,

- correcting the delayed image data in accordance with said detected angular data to thereby eliminate the unwanted movement influences of said flight movements of said carrier.

2. (Original) The method of claim 1, comprising the further

step of intermediately storing said image data from said CCD sensor on a data carrier to delay said image data by a time interval.

3. (Currently Amended) The method of claim 2, wherein the correction of said delayed image data is carried out as an on-line stabilization by performing the further step of displaying the corrected delayed image data as a stabilized image on a monitor on board said carrier.

4. (Currently Amended) The method of claim 1, comprising the further steps of:

recording the detected angular data together with the image data from said CCD sensor on a data carrier; and,

carrying out the correction of said delayed image data as an off-line evaluation in a fixed ground station.

5. (Original) The method of claim 1, wherein said time interval for delaying considers the time delay by said inertial sensor as well as by scanning and computation time.

6. (Original) The method of claim 1, wherein said inertial sensor is a strap-down sensor.

7. (Currently Amended) A method for digitally stabilizing an image recording with a CCD sensor, which is mounted in a moving or airborne carrier having a direction of flight, for substantially eliminating unwanted movement influences of flight

5 movements of said carrier on the image quality of the image
recorded by said CCD sensor, said flight movements including
movements about a roll axis and a pitch axis, the method
comprising the steps of:

detecting an image with said CCD sensor and outputting image
10 data;

detecting said flight movements of said carrier as angular
data with an inertial sensor and said inertial sensor being
adapted to supply said angular data with a time delay;

correcting said image data in accordance with said detected
15 angular data with said image data being time delayed by a time
interval relative to said detected angular data; and

shifting the image lines by pixels by the corresponding
angular increments transversely to the direction of flight when
correcting said image data to stabilize about the roll axis while
20 stabilizing about the pitch axis takes place by omitting or
reproducing whole lines.

8. (Previously Presented) An arrangement for digitally
stabilizing an image recording with a CCD sensor, which is
mounted in a moving or airborne carrier, for substantially
eliminating unwanted movement influences of flight movements of
5 said carrier on the image quality of the image recorded by said
CCD sensor, the arrangement comprising:

said CCD sensor being provided to detect images and to
output image data;

an inertial sensor for detecting movements of said carrier
10 as angular data with a time delay caused by said inertial sensor

having a finite bandwidth;

a first unit for delaying said image data by a time interval which considers said time delay; and,

15 a second unit for correcting the delayed image data in accordance with said detected angular data to thereby eliminate the unwanted movement influences of said movements of said carrier.

9. (Previously Presented) The arrangement of claim 8, wherein said first unit is an intermediate store for delaying said image data by said time interval.

10. (Previously Presented) The arrangement of claim 8, wherein said second unit is mounted on board said carrier and is adapted to carry out an on-line stabilization; and, wherein said arrangement further comprises a monitor on board said carrier for
5 displaying the corrected image data as a stabilized image.

11. (Previously Presented) The arrangement of claim 8, further comprising:

a unit for recording said angular data from said inertial sensor together with said image data on board said carrier; and,
5 said second unit for correcting said image data being mounted in a fixed ground station and said second unit being adapted to carry out an off-line image evaluation.

12. (Original) The arrangement of claim 8, wherein the time interval for delaying considers the time delay by said inertial

sensor as well as by scanning and computation time.

13. (Original) The arrangement of claim 8, wherein said inertial sensor is a strap-down sensor.

14. (Currently Amended) An arrangement for digitally stabilizing an image recording with a CCD sensor, which is mounted in a moving or airborne carrier having a direction of flight, for substantially eliminating unwanted movement influences of flight movements of said carrier on the image quality of the image recorded by said CCD sensor, said flight movements including movements about a roll axis and a pitch axis, the arrangement comprising:

said CCD sensor being provided to detect images and to output image data;

an inertial sensor for detecting movements of said carrier as angular data;

a first device for correcting said image data in accordance with said angular data; and,

a second device for delaying said image data by a time interval relative to said detected angular data,

wherein said first device is adapted to shift the image lines by pixels by the corresponding angular increments transversely to the direction of flight when correcting said image data to stabilize about the roll axis while stabilizing about the pitch axis takes place by omitting or reproducing whole lines.